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November 13, 2002

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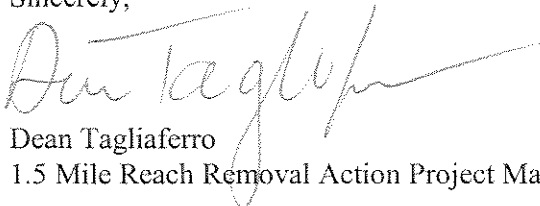
RE: October 2002 Monthly Report  
1.5 Mile Reach Removal Action  
GE-Pittsfield/Housatonic River Site

Enclosed please find the October 2002 Monthly Report for the 1.5 Mile Reach Removal Action. In accordance with the Consent Decree for the GE-Pittsfield/Housatonic River Site, the United States Environmental Protection Agency (EPA) is performing the 1.5 Mile Reach Removal Action, with General Electric funding a portion of the project through a cost sharing formula.

The EPA has entered into an agreement with the United States Army Corps of Engineers (USACE) to assist in the design and construction of the Removal Action. The USACE subsequently awarded a design-construct contract to Weston Solutions, Inc. (Weston). Weston, with several subcontractors, will be performing the design and construction activities for the 1.5 Mile Reach Removal Action.

If you have any questions, please contact me at (413) 236-0969.

Sincerely,



Dean Tagliaferro  
1.5 Mile Reach Removal Action Project Manager

## **1. OVERVIEW**

During October 2002, EPA, the United States Army Corps of Engineers (USACE), the USACE's contractor, Weston Solutions, Inc. and Weston's subcontractors continued remediation activities on the 1.5 Mile Reach Removal Action. The primary work included completing the bank soil and sediment excavation activities in Cells 1A, 1B and 2. Non-Aqueous Phase Liquid (NAPL)-impacted sediment was observed in Cells 1A and 1B and all NAPL-impacted sediment was successfully removed through mechanical excavation. In addition, backfilling activities were substantially completed in Cells 1A, 1B and 2.

## **2. CHRONOLOGICAL DESCRIPTION OF TASKS PERFORMED**

Refer to Figure 1 for an orientation of the sheetpile cells and their respective locations.

At the end of September, Cell 1A was flooded as a result of significant infiltration of water beneath and through the concrete bin block wall that formed the upstream and centerline containment wall. The flooding occurred prior to the completion of required excavation activities. During the first week of October, sediment excavation activities were performed for Cell 1A under flooded conditions. The sediment was excavated down to the three foot depth required by the project plans and specifications. The excavated material was placed into Cell 1B to dewater. The NAPL-impacted sediment was observed during this excavation and this material was stockpiled separately within Cell 1B. Since the excavation was performed under flooded conditions a visual inspection could not be performed to determine if NAPL-impacted sediment remained in Cell 1A. Therefore, six sediment core samples were collected from the base of the excavation. These cores confirmed that NAPL-impacted sediment remained in Cell 1A. Residual floating NAPL located inside Cell 1A was skimmed off using oil booms and sorbent pads. The project team determined that additional excavation would not be performed until the bin block containment walls were reconstructed and Cell 1A was dewatered.

Both the NAPL-impacted and non-NAPL-impacted sediment that originated from Cell 1A were removed and transported to the appropriate stockpile management area in Building 65. (See Table 1 for a daily summary of material transported to the stockpile management area.)

Sediment excavation activities were then performed for Cell 1B and again NAPL-impacted sediments were observed. Excavation was initially performed throughout the cell to the three foot excavation depth required by the project plans and specifications. However, in the upstream area, an additional foot of excavation was required to successfully remove the residual NAPL. Additional excavation was also performed along the lower bank to remove NAPL-impacted material. Post-excavation surveying was performed to confirm that the minimum required excavation depths were achieved and to document to quantity of additional NAPL-impacted sediment removed.

The installation of the centerline sheetpile wall for Cells and 2 and 4 continued.

During the second week of October, an excavator was placed in Cell 1A, which was flooded, and the centerline and some upstream bin blocks were removed, re-installed and resealed with grout. The installation of the centerline sheetpile wall for Cells 2 and 4 and the downstream cut-off for Cell 2 was completed and the installation of the centerline sheetpile wall for Cells 5 and 6 began.

During the third week of October, Cell 1A was dewatered and the residual NAPL-impacted sediment was successfully excavated and transported to Building 65. Upon completion of excavation activities, the new bin block walls were breached and the cell was flooded.

Cell 1A was backfilled with a minimum of 16 inches (thicker in areas over excavated to remove NAPL-impacted sediment) of Filter Layer A. Then a twenty inch thick layer of twelve inch riprap was installed thereby restoring the cell to the proposed design elevation. Cell 1B was backfilled in a similar manner. After backfilling was completed, post-restoration surveying was performed in Cells 1A and 1B.

Other remediation activities performed in the third week of October included the installation of a sump in Cell 2. Cell 2 was subsequently dewatered. Initially, the cell was dewatered by pumping water directly into the river until there were six inches of water remaining. Then the water was pumped to the on-site water treatment system and dewatering was completed. A baseline survey was performed to record existing elevations. Sediment excavation and removal activities were initiated by the end of the week. In addition, the installation of centerline sheetpile for Cells 5 and 6 continued.

During the fourth week of October, sediment and bank excavation activities continued in Cell 2. Cell 2 contained material designated as TSCA material (i.e., contains an average PCB concentration greater than 50 parts per million). Following the excavation of TSCA material, all equipment was decontaminated before continuing with excavating non-TSCA material. Both the TSCA and non-TSCA material was transported to the Building 65 stockpile management area.

On October 21, during transport of excavated material from Cell 2 to the Building 65 stockpile management area, small amounts of material spilled along the entire route. Both GE personnel and EPA contractor personnel notified EPA and the Army Corps of Engineers immediately. The spilled material was cleaned up using hand tools and the route from Cell 2 to Building 65 was cleaned up with a street sweeper. The street sweeper was then decontaminated and PCB wipe tests were collected to ensure proper decontamination prior to demobilization. No material was transported out of Cell 2 on October 22 and Weston and their subcontractor was required to implement corrective actions. The contractor was directed to submit a brief report summarizing the cause of the incident and corrective actions to be taken in the future. Corrective actions include the following: the discontinued use of an off-road dump truck for the transport of contaminated sediment and soil, additional oversight of the excavation and loading operations, reassignment of contractor personnel, and additional site specific training for truck drivers, foreman, and crew. Excavation and transportation activities resumed on October 23.

The installation of the centerline sheetpile for Cells and 5 and 6 continued. The downstream cut-off wall for Cell 6 was installed and then driven to the river bottom to allow for water discharge from drainage swale to flow into the river.

During the last week of October, the excavation of river sediment and bank soil was completed in Cell 2. NAPL was not observed throughout the Cell 2 excavation activities. The post-excavation survey was performed confirming that the required excavation depths had been achieved. Following approval of the post-excavation survey, backfilling of the sediment with common fill, Filter Layer A and then 12-inch rip rap was initiated. In addition, centerline sheetpile for Cells 5 and 6A continued and the removal of the sheetpile wall located between Cells 1A and 1B began. Lastly, due to low flow conditions in the river, the pre-excavation baseline survey for Cells 3 and 4 was initiated.

During the month of October, the water treatment system treated water from Cells 1A, 1B and 2. Sampling of the water treatment system for parameters included in the NPDES exclusion permit was performed on October 2, 11, 16 and 23. Air monitoring for particulate matter (PM10 sampling) and surface water turbidity monitoring was performed on a daily basis. The monthly PCB air monitoring event was performed on October 10. The twice-monthly surface water sampling for total suspended solids (TSS) and PCBs was performed on October 9 and October 30. Sampling of Filter Layer A for chemical parameters was performed on October 16 and October 30 and disposal characterization samples were collected from the NAPL-impacted sediment stockpile on October 24.

Geotechnical samples were collected for processed gravel, top soil, common fill, Filter Layer A, Filter Layer B, 9-inch, 12-inch and the 18-inch rip rap. The results of the geotechnical testing are not included in the monthly reports but are contained in other submittals and are available upon request.

Building 65 was divided into three stockpile management areas; one each for non-TSCA, TSCA and NAPL-impacted material. Daily inspections, operation and maintenance activities were performed within Building 65. This included the collection of accumulated water that drained from the stockpiles and transporting the water to the on-site water treatment system. In addition, an equipment decontamination pad was constructed inside Building 65.

Miscellaneous site preparation/maintenance activities performed in October included the construction of a temporary boulder staging area pad on the Lyman Street parking lot, the installation of a six-inch water drainage culvert beneath the west access road on parcel I9-4-25, the installation of two six-inch drainage culverts beneath the east access road on parcel I8-23-6, the placement of Jersey barriers as protection for the Lyman Street parking lot groundwater monitoring and recovery wells, and the installation of traffic control signs on Lyman Street. Also, a majority of the stockpiled logs from the tree clearing operation were chipped and transported to an approved wood burning facility. Lastly, work began on the construction of a temporary structure over the carbon vessels, sand filters and pumps to prevent this equipment from freezing up in the winter months.

### **3. SAMPLING/TEST RESULTS RECEIVED**

PCB sample results for the water treatment system sampling program were received for water samples collected on the following dates: October 2, 11, 16, and 23 (Table 2). The non-PCB analytical results were received for samples collected on September 26, 28, and 30 and October 2

(Table 2a). The non-PCB results for the October 11, 16, and 23 samples are not yet available. Analytical results for backfill materials are summarized in Table 3. This includes the sampling results for a sample of common fill collected on September 20, and the sample of Filter Layer A collected on October 16. The results for the Filter Layer A sample collected on October 30 are not yet available. The results of the daily particulate air monitoring program are summarized in Table 4. Table 5 is a summary of daily turbidity monitoring results. Results for PCB and TSS samples and water column monitoring data collected on September 26, October 9 are presented in Table 6. Analytical results for the samples collected on October 30 are not yet available. Table 7 presents the analytical data associated with NAPL-impacted sediment sample collected in Cell 1A on September 30. Results for PCB wipe samples collected on October 22 of decontaminated equipment are summarized in Table 8. The preliminary PCB results for PCB air sampling conducted on October 10 can be found in Table 9.

#### **4. DIAGRAMS ASSOCIATED WITH THE TASKS PERFORMED**

Figure 1 is a map of the Phase I area, and includes layout of Cells 1A, 1B, 2, 3, 4, 5, 6, and 6A, lot parcel identification numbers, water monitoring locations, PCB air sampling locations, access road locations, fence line location, the water treatment system pad location, crane pad locations, the effluent discharge location, and the utility trench location.

#### **5. REPORTS RECEIVED AND PREPARED**

Weston received a vibration monitoring summary report for the period of 27 September to 31 October from Geosonics, Inc. During this period, the seismograph was set up at the Lyman Street Bridge on continuous seismic mode. Activities occurring near the Lyman Street bridge during this period included normal background activities, sheet pile driving, bin block installation and general construction activities. The maximum ground vibration level reached during this period was 0.09 inches per second (ips). This reading occurred on October 25, 2002 at 11:15am. This level represents 5% of the state's recommended limit of 2.0 ips. All readings during this period complied with State Regulations.

#### **6. PHOTO DOCUMENTATION OF ACTIVITIES PERFORMED**

See attached photos.

## **7. BRIEF DESCRIPTION OF WORK TO BE PERFORMED IN NOVEMBER 2002**

- Complete backfilling Cell 2.
- Complete the removal of cut-off wall located between Cells 1A and 1B and remove the upstream concrete bin block wall from Cell 1A. Perform any incidental backfilling/restoration activities required in Cells 1A and 1B.
- Remove the upstream cut-off wall for Cell 2 and drive the downstream cut-off wall for Cell 2 to the river bottom allowing the river to flow through the south side of the river channel.
- Construct the Cell 3 containment wall and install the downstream cut-off wall for Cell 4.
- Excavate and backfill Cells 3 and 4.
- Complete the enclosure at the water treatment system that houses the filters and the pumps and install heating system.
- Continue stockpile management activities at Building 65.
- Construct stockpile management areas in Building 63 and 68.
- Transfer TSCA materials from Building 65 to Building 63.
- Transport NAPL-impacted sediment to an approved off-site disposal facility.
- Continue operation of water treatment system.
- Continue daily air and turbidity monitoring.
- Continue PCB air sampling (once a month), water column sampling (twice a month), and water treatment system sampling (monthly).
- Continue vibration monitoring at Lyman Street bridge.

## **8. ATTACHMENTS TO THIS REPORT**

Table 1. Excavation Quantity Summary Table

Table 2. NPDES PCB Sampling Results for Water Treatment System

Table 2a. NPDES non-PCB Sampling Results for Water Treatment System

Table 3. Backfill Material Testing Results

Table 4. Daily Air Monitoring Results

Table 5. Daily Water Column Turbidity Monitoring Results

Table 6. Summary of Turbidity, PCB, and TSS Water Column Monitoring Results

Table 7. NAPL – Impacted Sediment Testing Results

Table 8. Equipment Confirmatory Wipe Sample Results

Table 9. Air, PCB Sampling Results

Figure 1- Phase I Site Plan

Photodocumentation